Serial no. 10/773,503

Amendment dated Dec. 15, 2006

Reply to Office Action of Sept. 22, 2006

Amendments to the Claims:

This listing of claims will replace all prior versions and listings of claims in the application.

Listing of Claims:

1-36. (Cancelled).

37. (Previously presented) An electrosurgical instrument having an end effector, the end effector configured to simultaneously provide radio frequency power and a fluid to treat tissue, the power sufficient to cause a dimensional change of the tissue, the end effector comprising:

at least one electrode;

at least one fluid outlet; and

a dimensional change sensor to detect measure the dimensional change of the tissue.

38. (Previously presented) The electrosurgical instrument of claim 37 wherein: the dimensional change sensor is configured to move relative to the dimensional change of the tissue.

39. (Previously presented) The electrosurgical instrument of claim 37 wherein: the dimensional change sensor is configured to provide feedback to vary the radio frequency power according to the dimensional change of the tissue.

40. (Previously presented) The electrosurgical instrument of claim 37 wherein: the dimensional change sensor is configured to provide feedback to treat the tissue to a predetermined dimensional change.

41. (Previously presented) The electrosurgical instrument of claim 37 wherein: the dimensional change sensor is configured to provide feedback to measure the dimensional change.

4

Serial no. 10/773,503 Amendment dated Dec. 15, 2006 Reply to Office Action of Sept. 22, 2006

- 42. (Previously presented) The electrosurgical instrument of claim 37 wherein: the dimensional change sensor is operatively associated with a device to provide a measurement of the dimensional change.
- 43. (Previously presented) The electrosurgical instrument of claim 37 wherein: the dimensional change sensor is operatively associated with means to provide a measurement of the dimensional change.
- 44. (Previously presented) The electrosurgical instrument of claim 37 wherein: the dimensional change sensor comprises a contact sensor.
- 45. (Previously presented) The electrosurgical instrument of claim 37 wherein: the dimensional change sensor comprises a shrinkage sensor; and the dimension change of the tissue comprises a shrinkage of the tissue.
- 46. (Previously presented) The electrosurgical instrument of claim 45 wherein: the shrinkage sensor is configured to move relative to the shrinkage of the tissue.
- 47. (Previously presented) The electrosurgical instrument of claim 45 wherein: the shrinkage sensor is configured to provide feedback to vary the radio frequency power according to the shrinkage of the tissue.
- 48. (Previously presented) The electrosurgical instrument of claim 45 wherein: the shrinkage sensor is configured to provide feedback to treat the tissue to a predetermined shrinkage.
- 49. (Previously presented) The electrosurgical instrument of claim 45 wherein: the shrinkage sensor is configured to provide feedback to measure the shrinkage.

Serial no. 10/773,503 Amendment dated Dec. 15, 2006

Reply to Office Action of Sept. 22, 2006

- 50. (Previously presented) The electrosurgical instrument of claim 45 wherein: the shrinkage sensor is operatively associated with a device to provide a measurement of the shrinkage.
- 51. (Previously presented) The electrosurgical instrument of claim 45 wherein:
 the shrinkage sensor is operatively associated with means to provide a measurement of the shrinkage.
- 52. (Withdrawn) The electrosurgical instrument of claim 37 further comprising: a monopolar electrosurgical instrument.
- 53. (Previously presented) The electrosurgical instrument of claim 37 further comprising: a bipolar electrosurgical instrument.
- 54. (Previously presented) The electrosurgical instrument of claim 37 wherein: the at least one fluid outlet is positioned to provide the fluid onto the at least one electrode.
- 55. (Previously presented) The electrosurgical instrument of claim 37 wherein: the at least one fluid outlet is at least partially defined by the at least one electrode.
- 56. (Previously presented) The electrosurgical instrument of claim 37 wherein: the at least one fluid outlet is at least partially defined by a hole in the at least one electrode.
- 57. (Previously presented) The electrosurgical instrument of claim 37 wherein: the at least one fluid outlet is configured to provide the fluid to wet the at least one electrode.

Serial no. 10/773,503 Amendment dated Dec. 15, 2006

Reply to Office Action of Sept. 22, 2006

- 58. (Previously presented) The electrosurgical instrument of claim 37 wherein: the at least one electrode comprises a plurality of electrodes.
- 59. (Previously presented) The electrosurgical instrument of claim 37 wherein: the at least one fluid outlet comprises a plurality of fluid outlets.
- 60. (Previously presented) The electrosurgical instrument of claim 37 wherein: the at least one electrode comprises a first electrode and a second electrode; and the at least one fluid outlet comprises a first fluid outlet and a second fluid outlet.
- 61. (Previously presented) The electrosurgical instrument of claim 60 wherein: the first fluid outlet is positioned to provide the fluid onto the first electrode; and the second fluid outlet is positioned to provide the fluid onto the second electrode.
- 62. (Previously presented) The electrosurgical instrument of claim 60 wherein: the first fluid outlet is configured to provide the fluid to wet the first electrode; and the second fluid outlet is configured to provide the fluid to wet the second electrode.
- 63. (Currently amended) An electrosurgical instrument having an end effector, the end effector configured to simultaneously provide radio frequency power and a fluid to treat tissue, the power sufficient to cause a dimensional change of the tissue, the end effector comprising a jaw and having:

at least one electrode;

at least one fluid outlet; and

a dimensional change sensor to detect the dimensional change of the tissue

The electrosurgical instrument of claim 37 wherein:

the end effector comprises a jaw.

64. (Currently amended) <u>An electrosurgical instrument having an end effector, the end</u> effector configured to simultaneously provide radio frequency power and a fluid to treat tissue,

Serial no. 10/773,503 Amendment dated Dec. 15, 2006 Reply to Office Action of Sept. 22, 2006

the power sufficient to cause a dimensional change of the tissue, the end effector comprisinga
forceps and having:
at least one electrode;
at least one fluid outlet; and
a dimensional change sensor to detect the dimensional change of the tissue
The electrosurgical instrument of claim 37 wherein:
the end effector comprises a forceps.
65. (Currently amended) An electrosurgical instrument having an end effector, the end
effector configured to simultaneously provide radio frequency power and a fluid to treat tissue,
the power sufficient to cause a dimensional change of the tissue, the end effector comprising:
at least one electrode;
at least one fluid outlet; and
a dimensional change sensor to detect the dimensional change of the tissue, wherein
The electrosurgical instrument of claim 37 wherein: the dimensional change sensor comprises a
clamp structure to grasp the tissue.